IN THE ABSTRACT

Please amend the Abstract as follows:

-- ABSTRACT

A signal processing device which outputs a discrete signal composed of a string of the sampling values and parameters m signal.—There is provided a new signal processing device that uses functions appropriate to signal properties to acquire high quality signals. The signal processing device includes a sampling circuit which2-that samples an input signal and outputs a discrete signal, multiple function generators which 3 that generate multiple sampling functions with parameters m different from each other, plural inner product operating units [4-] for each of the-parameters m that take an inner product between the input signal and each of plural sampling functions and output an inner product operating value, and a judging unit which that determines parameter m providing a minimum error out of multiple errors composed of differences between the sampling value and inner product operating values output from the multiple inner product operating units and outputs the <u>parameters</u> parameter m signal. The signal processing device outputs a discrete signal composed of a string of the sampling values and the parameter m signal. --